

REMARKS/ARGUMENTS

Claims 1-16, and 19 have been cancelled. Claims 17, 18 and 20-37 are pending.

Claim rejections under 35 USC § 102

The Examiner rejected claims 17-18, 20-22, 29-31, 36 and 37 under 35 U.S.C. 102(e) as being anticipated by Hu (US Patent 6,316,354). The Examiner stated that col. 5, lines 10-15, and fig. 4 of Hu teaches generating a plasma from NH₃, which etches the low-k dielectric layer without etching the layer 20/ hard mask, which reads on selectively etching the low-k dielectric with respect to the hardmask. Col. 5, lines 10-15 and fig. 4 of Hu describe a process of removing the via resist mask 40, not the etching of the low-k dielectric. Nothing in col. 5, lines 10-15, states the plasma from NH₃ is used to etch the low-k dielectric. This is supported by col. 4, lines 45-52, and fig. 2 of Hu, which the Examiner cited as teaching removing the photoresist 30 when exposing the substrate to NH₃ plasma. This cited section discusses the removal of photoresist using NH₃, but does not discuss etching of the low-k dielectric with NH₃ plasma, as recited in claims 17, 31 and 37.

Col. 4, lines 20-30, of Hu states that the via 40 has been previously etched and now the resist mask must be removed. The following process in the remainder of col. 4 and in col. 5 then describes the removal of the resist mask, not the etching of a via in the low-k dielectric layer, since the via was already etched. For at least these reasons, claims 17, 31, and 37 are not anticipated by Hu.

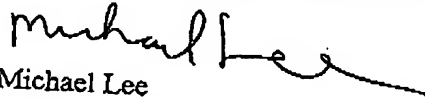
Claims 18, 20-22, 29-30, and 36 are ultimately dependent on the independent claims. In addition, these claims add additional features, which when taken together with the limitations of the independent claims are not anticipated or made obvious by the cited references. For at least these reasons, claims 18, 20-22, 29-30, and 36 are not anticipated or made obvious by Hu.

The Examiner objected to claims 23-28 and 32-35 as being dependent upon rejected base claims, but would be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claim. The applicant's attorney appreciates the Examiner's comments. These claims will be amended as requested if required at a later time.

Applicants believe that all pending claims are allowable and respectfully request a Notice of Allowance for this application from the Examiner. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at telephone number (650) 961-8300.

Respectfully submitted,

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